DRAINAGE DESIGN

OPERATOR _____ ADDRESS _____

COMMUNITY _____ PRACTICE _____ JOB APPROVAL CLASS _____

FIELD NO. _____ DESIGNED BY _____ DATE _____

CHECKED BY _____ DATE _____

APPROVED BY _____ DATE _____

DESIGN TABLE - SUBSURFACE DRAIN

(1) LINE	(2) STATIONS	(3) DRAIN COEF.	REQUIRED CAPACITY (4) PART. AC. OR CFS	REQUIRED CAPACITY (5) ACCUM. AC. OR CFS	(6) GRADE PERCENT	DRAIN (7) KIND	DRAIN (8) SIZE INCHES	(9) CAPACITY AVAILABLE AC. OR CFS

INSTRUCTIONS

COLUMN 1 - INSERT MAIN OR LATERAL NUMBER BEING DESIGNED.

COLUMN 2 - INSERT STATIONS FOR SECTION OF LINE BEING DESIGNED.

COLUMN 3 - INSERT DRAINAGE COEFFICIENT IN CFS/1000FT. OR IN. REFER TO THE DRAINAGE GUIDE AND ENGINEERING STANDARD 606.

COLUMN 4 - INSERT THE NUMBER OF ACRES OR CFS, TO THE NEAREST TENTH, FOR THE REACH OF LINE BEING DESIGNED, (USE CONSISTENT UNITS THROUGHOUT DESIGN). FOR PATTERN SYSTEMS, (DRAINAGE COEFFICIENT EXPRESSED IN INCHES), ACRES IS THE (LINE SPACING x LENGTH OF LINE) /43560. FOR RANDOM OR INTERCEPTOR LINES, (DRAINAGE COEFFICIENT EXPRESSED IN CFS/1000FT.), CFS IS (LENGTH OF LINE x DRAINAGE COEFFICIENT) / 1000. FOR OPEN OR BLIND INLETS, ACRES IS THE DRAINAGE AREA ABOVE THE INLET. WHEN USING UNITS OF ACRES, CONVERT ALL ENTRIES TO THE EQUIVALENT ACRES DRAINED FOR A 3/8" DRAINAGE COEFFICIENT EFM DRAWING NO. 14-1, FIGURE 1440, FIGURE 1442 AID IN CONVERTING TO ACRES DRAINED USING A 3/8" COEFFICIENT OR IN CONVERTING BETWEEN CFS AND ACRES.

COLUMN 5 - ADD ACCUMULATIVE ARES OR CFS TO BE DRAINED.

COLUMN 6 - INSERT DESIGN GRADE FROM PROFILE SHEET.

COLUMN 7 - INSERT KIND OF DRAIN: CP - CORRUGATED PLASTIC, CT - CONCRETE TILE, CLT - CLAY TILE

COLUMN 8 - INSERT DRAIN SIZE.

COLUMN 9 - INSERT THE LINE CAPACITY BY USING FIGURE 1440, PAGE 14-108.1 (CT OR CLT), OR FIGURE 1442, PAGE 14-108.2 (CP), EFM. USE THE SAME UNITS AS USED IN COLUMNS 4 AND 5. THIS VALUE MUST BE EQUAL TO OR GREATER THAN THE REQUIRED CAPACITY, (COLUMN 5), OF THE LINE FOR THE DESIGN TO BE SATISFACTORY.